UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,358	09/14/2004	Bradford Morse	WC 001	5357

56719 7590 10/22/2007

MEDLER FERRO PLLC
8607 ROCKDALE LANE
SPRINGFIELD, VA 22153

EXAMINER
GUIDOTTI, LAURA COLE

ART UNIT	PAPER NUMBER
3723	

MAIL DATE	DELIVERY MODE
10/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/711,358	MORSE ET AL.	
	Examiner	Art Unit	
	Laura C. Guidotti	3723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 August 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9,17,19 and 25-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9,17,19 and 25-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 September 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 1, 2, 4-5, 17, 19, 25-26, and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ussen, USPN 6,550,089 in view of Merrill et al., US 3,722,134 and in further view of Policicchio, US 6,996,871.

Ussen discloses the claimed invention including a drive unit (9; the device guides itself under the influence of a signal from a remote control, the device drives itself according to the signal from the remote control; the device is capable of guiding itself by deflecting off objects, corners, or obstacles as it may bounce away from those surfaces; the drive unit's internal mechanism is actually the portion receiving the remote control and guides the unit 9) having an outer surface (Figure 4) and a motorized internal mechanism adapted to impart "tumbling" motion to the drive unit (1; Column 2 Line 67 to Column 3 Line 2), a disposable cleaning sheet (10; Column 3 Line 44 states that the sheet/cover is removable and therefore capable of being disposed of) having a first and second side (see Figure 4), wherein the sheet is a formed sheet (10, the sheet is "formed") constructed for and capable of having a snug fit to the drive unit without the use of adhesives or fasteners (as it is elastic, Column 3 Lines 44-46), wherein the drive unit to impart rotary motion to the sheet (Column 3 Lines 43-46; Figure 4) (claims 1 and 19). Regarding claim 2, the sheet completely encompasses the drive unit (as it is made of two hemispheres, Column 3 Lines 43-46). Regarding claims 4, 25, and 28 the outer

surface of the drive unit is substantially spherical (Column 3 Line 43; Figure 4).

Regarding claim 17, the method of making the cleaner includes obtaining the drive unit having a motorized internal mechanism and providing a sheet for use with the drive unit (Column 3 Lines 43-46). The motorized internal mechanism of Ussen includes a remote controlled receiver within the sphere that appears to be a wheeled toy vehicle (Figure 4; Column 3 Lines 40-50), and the motion does not include a random path controlled without human interaction. Also the cleaning sheet of Ussen does not include an appendage extending therefrom.

Merrill et al. teaches a similar drive unit that has a spherical outer surface (outer surface of 10) and a motorized internal mechanism (16) that is adapted to impart a tumbling motion to the drive unit, the motion having a random path controlled without human interaction (Column 1 Lines 65-68; Column 2 Line 51 to Column 3 Line 6; Column 3 Lines 27-29). This drive system and motion allows the device to easily change direction (Column 1 Lines 22-31). Regarding claims 5, 26, and 29 the shape of the outer surface of the drive unit may be ellipsoidal (elliptical, Column 3 Lines 14-17).

Policicchio discloses a cleaning pad that has at least one appendage extending from the main pad (appendage is 207, 411, or 413) that acts as a cuff to pick-up additional particulate matter not cleaned by the main pad (Column 14 Lines 15-23). It is also noted that the appendage or cuff (207, 411, or 413) works in such a way that when there is a change in direction of motion of the pad, that the cuffs flip to a reverse side and thus have two functioning cleaning surfaces (Column 14 Line 46 to Column 15 Line 9 further describes the benefits of the cuff appendage).

It would have been obvious for one of ordinary skill in the art at the time of the invention to substitute the motorized internal mechanism of Ussen, for one that imparts a tumbling motion to the drive unit, wherein the motion has a random path is controlled without human interaction, as Merrill et al. teach, so that the device may change directions easily when it encounters an obstacle and does not require a user to be present during a cleaning process thus allowing a user to spend less time cleaning and further it would have been obvious for one of ordinary skill in the art at the time of the invention to modify the sheet of Ussen to further include at least one appendage extending therefrom, as Policicchio teaches, in order to improve upon the ability of the traditional sheet to pick-up additional particulate matter that may have not been initially cleaned by the sheet.

2. Claims 3, 6-9, 27, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ussen, USPN 6,550,089, Merrill et al., US 3,722,134, and Policicchio, US 6,996,871 as applied to claims 1, 2, 17, or 19, in view of Sohmer, USPN 3,742,547.

Ussen, Merrill et al., and Policicchio disclose all elements mentioned above. Ussen further includes an embodiment (Figures 1-3b) including a cylindrical shaped drive unit (5) having an outer surface (see Figures 1-3b) and a motorized internal mechanism adapted to impart rotary motion to the drive unit (1; Column 2 Line 67 to Column 3 Line 2). Regarding claims 6, 27, and 30, the shape of the outer surface of the drive unit is at least substantially cylindrical see Figures 1-3b). Ussen states that drive unit (5) has a sticky surface (Column 3 Lines 20-25, 40-42), however does not disclose

that there is a sheet having a first side and a second side that is connected to partial portions of the outer surface of a cylindrical shaped drive unit.

Sohmer discloses a lint sweeper (10) for cleaning floors and carpets using an adhesive surface (25) on a cylindrical roller or drive unit (23) for removing lint and dust (Column 1 Lines 39-42). The adhesive surface of Sohmer is a sheet having a first and second side (the adhesive surface or layer or tape 25 has a first and second side; Figures 2-3b) so that after the adhesive cleaning surface is contaminated with debris, a user can remove a used portion and provide and unused portion (Column 2 Lines 48-56). The sheet (25) only partially encompasses the drive unit (23; Figure 2).

It would have been obvious for one of ordinary skill in the art at the time of the invention to substitute the sticky cylindrical drive unit of Ussen, Merrill et al., and Policicchio for a cylindrical drive unit that has an adhesive sheet with first and second sides that is connected to the outer surface of the drive unit, as Sohmer teaches, so that a user may remove debris-contaminated sheets and provide unused cleaning sheets when cleaning. Also, it would have been obvious for one of ordinary skill in the art to modify the outer surface of Ussen and Merrill et al. so that the adhesive cleaning sheet portion is only partially encompassing the drive unit, as Sohmer teaches, so that only the surface rotary contact with the floor includes the cleaning sheet and material is not wasted on side portions that do not serve as cleaning surfaces.

Response to Arguments

3. Applicant's arguments with respect to claims 1-9, 17, 19, and 25-30 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C. Guidotti whose telephone number is (571) 272-1272. The examiner can normally be reached on Monday-Thursday, 7:30am - 5pm, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on (571) 272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Laura C Guidotti
Laura C Guidotti
Patent Examiner
Art Unit 3723

lcg